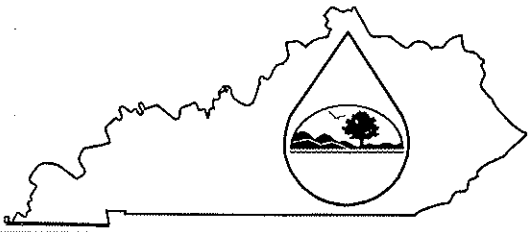
KPDES FORM HQAA

NOV - 6 2007



Kentucky Pollutant Discharge Elimination System (KPDES)

High Quality Water Alternative Analysis

The Antidegradation Implementation Procedures outlined in 401 KAR 5:030, Section 1(3)(b)5 allows an applicant who does not accept the effluent limitations required by subparagraphs 2 and 3 of 5:030, Section 1(2)(b) to demonstrate to the satisfaction of the Environmental and Public Protection Cabinet that no technologically or economically feasible alternatives exist and that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the water is located. The approval of a POTW's regional facility plan pursuant to 401 KAR 5:006 shall demonstrate compliance with the alternatives analysis and socioeconomic demonstration for a regional facility. This demonstration shall also include this completed form and copies of any engineering reports, economic feasibility studies, or other supporting documentation

I. Permit Information

Facility Name:	ICG Hazard, LLC	**KPDES NO.:**	N/A
Address:	1021 Tori Dr.	**County:**	Breathitt/Perry
City, State, Zip Code:	Hazard, KY 41701	**Receiving Water Name:**	Troublesome Creek

II. Alternatives Analysis

	Yes	No
1. Has discharge to other treatment works been investigated? (If yes, then indicate which treatment works were considered and the reasons why that discharge to these works is not feasible.)	☒	☐

The closest treatment works facility has been investigated and determined that it is located in Jackson, KY. This facility is approximately 16.2 miles from the location of the proposed discharge site. The estimated cost to install a sewer pipeline is $60.00 per foot, for this project that would equate to $5,213,880 to install the pipeline. In addition to the pipeline there would need to be an estimated two pumping stations installed at an estimated cost of $150,000 each. This would bring the total cost to $5,513,880 to install a sewer line and pumping stations for the mine site. This cost is in addition to the cost to upgrade the existing treatment plant to handle the additional volume.

	Yes	No
2. Have other discharge locations been evaluated? (If yes, then indicate what other discharge locations have been evaluated and the reasons why these locations are not feasible.)	☒	☐

Discharge to other locations has been evaluated and it has been determined that to discharge to Cockrell Fork and Caney Creek would require approximately 14.5 miles of pipe at a cost of $4,593,600. It would also need five pumping stations at a cost of $150,000 each. This would Bring the total cost to $5,343,600 to discharge to another location. This would make this unfeasible due to excessive high costs.

II. Alternatives Analysis - continued

	Yes	No
3. Has water reuse or recycle been investigated as an alterative to discharge? (If yes, then provide the reasons why it is not a feasible alternative	☒	☐

The only significant reuse of water for this mining operation would be redistribution of water over the site. Normally, water redistribution of this type is limited to 1,000 gallons/day for each acre disturbed on areas with slopes of 6% or less. With an average slope for the mine site at 32%, and with a possible runoff produced by a 25 year, 24 hour storm is in excess of 2,000,000 gallons, redistribution would not be feasible. With a proposed disturbance of 336 acres and 32% slopes, approximately 200 gallons/acre, or 67,200 gallons, of runoff could be redistributed on the entire area, leaving a 1,932,800 gallon excess. Due to the amount of runoff to be contained and the configuration of the mine area, a minimum of 26, 75,000 gallon cisterns would be required. At $65,000.00 per cistern, in addition to the installation cost, the storage portion of the project only would cost an estimated $1,690,000.00. The redistribution of a portion of the runoff would also include extensive piping through out the mine site. The cost for the total storage and redistribution project is estimated at $2,700,000.00.

	Yes	No
4. Have alternative process or treatment options been evaluated? (If yes, then indicate what process or treatment options have been evaluated and provide the reasons they were not feasible.)	☒	☐

The Underground mining method was considered as an alternative to the surface mining methods proposed, however due to the lack of a minimum depth to the coal seams to be mined this Alternative was determined to be not practicable. A waste water treatment plant was also considered. The cost of construction of waste water treatment plant to treat the estimated quantity of water generated from the 47 inches of annual rainfall, determined to be approximately 428,820,479 gallons, would be approximately $5,900,000.00. This cost, in addition to the $250,000.00 cost of diverting all surface flow to the plant, would total $6,150,000.00. The cost of the plant operation, maintenance and chemicals required for the treatment process would be in excess of $1,000,000.00 for the proposed life of the mine site. The removal of the waste water treatment plant at the time of bond release would be approximately $4,000,000.00. The total cost of the waste water treatment plant construction, maintenance, operation and removal would be in excess of $11,000,00.00.

II. Alternatives Analysis - continued

	Yes	No
5. Have on-site or subsurface disposal options been evaluated? (If yes, then indicate the reasons they were not feasible.)	☒	☐

Underground injection was considered as an alternative, however there are no abandoned underground workings in the vicinity of this mine site. The nearest underground workings are located approximately 13 miles from the proposed site. To pump this distance would cost $60.00 per foot for the pipe, in addition to $150,000.00 per pumping station. It is estimated that this would require ten (10) pumping stations, bring the total cost to $5,565,420.00.

Containing the discharge on site in cisterns or septic systems was considered and was found not to be feasible due to the amount of runoff associated with the mine site. Only 10 to 15% of 428,820,479 gallons of annual rainfall could be directed to septic systems, due to their limited capacities. This would also require the installation of thousands of feet of pipe in wooded areas on slopes of 40% or greater. At an estimated cost of $3.00 per gallon, the cost would exceed $1,286,461,437.00. The cost of removing the system and restoring the land would have an estimated cost of $10,000,000.00. Injection into underground works or into a septic system would adversely affect the local groundwater supply. The injected water could possibly reenter the surface water system due to the fractured geologic strata associated with the region.

	Yes	No
6. Have any other alternatives to lowering water quality been evaluated? (If yes, then describe those alternatives evaluated and provide the reasons why these alternatives were not feasible.)	☒	☐

Abandoning the project was considered, however this would cause a direct economic loss to households, with an indirect loss to nearby communities such as Clayhole, Jackson and Haddix. The loss of goods and services utilized by the employees will impact all communities in the area. The loss of 75 jobs with annual salaries of $50,000.00 would result in an annual loss of $3,750,000.00 in salaries with an additional loss of $1,250,000.00 of spending to local businesses. The costs of complying with stricter standards could mean treatment of runoff. The cost of treatment of runoff varies based on flow rate, acidity, iron levels and the type of treatment utilized. For a ten (10) year treatment plan the cost could range from $500,000.00 to $3,000,000.00 based on 1990 costs.

III. Socioeconomic Demonstration

1. State the positive and beneficial effects of this facility on the existing environment or a public health problem.

Existing sources of pollutants consist of old logging operations. These old logging operations have allowed excess sediment to enter the stream. This project will provide controll for and eliminate this source of pollution.

2. Describe this facility's effect on the employment of the area

This project will directly employ 54 people and indirectly affect the employment of 450 people associated with the proposed surface mining area. These jobs typically consist of better paying jobs with pay rates of 20 to 25 dollar an hour or an annual salary of $50,000. The loss of these jobs would have a vast affect on the local communities of Jackson and Clayhole. These jobs would create an estimated $2,700,000 of spending money in these local Communities

3. Describe how this facility will increase or avoid the decrease of area employment.

This project will directly employ 54 people and indirectly affect the employment of 450 people associated with the surface mining project. Without this project there will be a huge number of jobs lost as well as no new jobs created from this project in an area that already has a high unemployment percentage.

4. Describe the industrial or commercial benefits to the community, including the creation of jobs, the raising of additional revenues, the creation of new or additional tax bases.

This project will directly employ 54 people and indirectly employ 450 within the surface mining project. The project will contribute an estimated $2,700,000 to the local and state economy in an economically depressed area. The coal mined from the surface mines will contribute 4.5% of the money made off each ton of coal sold to the coal severance tax. This project will contribute $250,000 to the severance tax. During the 2004-2005 physical year Breathitt/Perry counties generated $20,046,734 in coal severance tax.

5. Describe any other economic or social benefits to the community.

Clayhole and Jackson in Breathitt/Perry counties as are most areas in the region known for higher unemployment rates, these higher paying jobs will provide an economic benefit to the community. This project will also require the continued maintenance and upkeep of the local roads which will benefit the 100 residences in the area.

III. Socioeconomic Demonstration - continued

	Yes	No
6. Will this project be likely to change median household income in the county? See Att. 6.1	☒	☐
7. Will this project likely change the market value of taxable property in the county?	☒	☐
8. Will this project increase or decrease revenues in the county?	☒	☐
9. Will any public buildings be affected by this system?	☐	☒

10. How many households will be impacted by this project? 100

11. How will those households be impacted?

This project supports 54 high paying jobs. These range from the jobs provided at the mine site, to the design and support jobs located at the office in Hazard Ky. The social benefits to these households include an improved standard of living, better health care and less reliance on welfare and other social programs. The loss of these jobs would absolutely have a negative impact on the ability to fund future educational opportunities for the children of these affected households.

	Yes	No
12. Does this project replace any other methods of sewage treatment to existing facilities? (if so describe how)	☐	☒

	Yes	No
13. Does this project treat any existing sources of pollution more effectively? (If so describe how.)	☒	☐

The past logging impacts have increased the sediment supply that is entering the stream. The stream banks are also unstable which increases the sediment load in the stream. The proposed activity will include a new pond/silt structures that will help reduce the amount of sediment that reaches Troublesome Creek.

III. Socioeconomic Demonstration - continued

	Yes	No
14. Does this project eliminate any other sources of discharge or pollutants? (If so describe how.)	☒	☐

Old logging operations are a source of discharge in this area. Any sediment currently entering the stream will now be diverted through pond/silt structures that are proposed for this site therefore eliminating a portion of the sediment deposited in Troublesome Creek. This structure will provide sediment control for these areas until phase III bond release and will be the pond/silt structure will be restored at this point.

15. How will the increase in production levels positively affect the socioeconomic condition of the area?

It is projected that the mine will increase coal production in Breathitt/Perry County, mining an estimated 2,500,000 salable tons during the life of the mine. This will generate additional coal severance tax dollars of approximately $250,000.00 to be used by state and local governments. This increase in production will also add 54 high paying jobs to the areas employment base with the addition of $2,700,000.00 per year in wages to the Breathitt/Perry County area.

16. How will the increase in operational efficiency positively affect the socioeconomic condition of the area?

Increasing the operational efficiency of this mine by utilizing professional mine management methods, such as area mining and contemporaneous reclamation practices to preserve, will minimize and restore the view shed in this area. Utilization of the most modern mining equipment available will produce the cleanest coal extraction possible.

IV Certification: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Title:	**Don R. Gibson, Director, Permitting & Regulatory Affairs - KY**	**Telephone No.:**	(606)889-8234
Signature:	Don R. Gibson	**Date:**	10/9/07